statement that the organism would be freely available once a patent has issued. As noted in the Specification, at paragraph 0024, microorganisms within the scope of the present invention were deposited on March 13, 2002, with the American Type Culture Collection in accordance with the provisions of the Budapest Treaty on the International Recognition of the Deposit Microorganisms for the Purpose of Patent Procedure. The American Type Culture Collection is located at 10801 University Boulevard, Manassas, Virginia 20110-2209, USA. The deposited microorganisms have been assigned ATCC Designation Numbers PTA-4110, PTA-4111 and ATTC 66669. A copy of the receipt for this deposit is attached hereto, showing on its face the instruction that they release the culture without restriction after a relevant patent issues.

For the record, Applicants state that the cultures have been deposited with the American Type Culture Collection and that the culture is to be released without restriction after a relevant patent issues.

Further, the Examiner has requested further identification of the Burkholdria microorganism, since there is a vast array of patent and non-patent literature referring to Burkholderia and previously named Burkholderia microorganisms. Applicants assert, however, that the culture employed in the present claims and deposited with the ATCC was previously identified as a novel in testing by the Deutsche Sammlung von Mikroorganismen and Zellkulturen GmbH. A copy of their analysis and report,

comprising a complete description of the microorganism, is also enclosed for the Examiner's use.

WHEREFORE, in consideration of the above comments and the documents appended hereto, reexamination and allowance are respectfully requested.

Date () 2004

Robert Charles Beam, Esq. Reg. No. 28,182 Attorney for Applicant

(973) 724-3411

Mailing Address: U.S. Army ARDEC Attn: AMSRD-AAR-GC R. Beam / Building 3 Picatinny Arsenal New Jersey 07806-5000

# ATCC

10801 University Blvd • Manassas, VA 20110-2209 • Telephone: 703-365-2708 • FAX: 703-2745

The American Type Culture Collection (ATCC) has received your deposit of a culture in connection with the filing of an application for gatent. The following information is provided to fulfill requirements.

Name and Address of Depositors

Geo-Centers, Inc.

Attn: Sheng-Yili Lee

Building 472, Picatinny Arsenal

New Jersey 07806

Deposited on Behalf of:

US Army

Date of Receipt of Culture by the ATCC: February 28, 2002

Scientific Description Rhizoblum rhizogenes BL Depositor's Reference

Patent Deposit Designation

Burkholderia sp. BL

A166 C81

PTA-4110 PTA-4111

The ATCC understands that:

- 1. The deposit of this culture does not grant ATCC a license, either express or implied, to infringe the patent, and our release of this deposit to others does not grant them a license, either express or implied, to infringe the patent.
- If this deposit should die or be destroyed during the effective term of the patent, it shall be your responsibility to replace it with viable material. It is also your responsibility to supply a sufficient quantity for distribution for the deposit term (30 years or 5 years following the most recent request for the deposit).

Prior to the issuance of a U.S. Patent, the ATCC agrees in consideration for a one-time service charge, not to distribute the culture or any information relating thereto or to its deposit except as instructed by the depositor or relevant patent office. After a relevant patent issues, and we are instructed to release the culture, the deposit will be made available for distribution to the public without any restrictions. The ATCC agrees to maintain the deposit for a period of thirty (30) years from deposit date, or at least five (5) years after the most recent request for a sample, whichever is longer.

We will inform you of requests for the culture.

The deposit was tested on March 11, 2002 and found to be viable.

American Type Culture Collection

Marie Harris

ATCC Patent Depository

co: Mr. Robert Beam

(Ref. Docket or Case No.: 2001-012)



DESCRIPTION OF PROPERTY.

Goth Content New Aption Operations Atth: Shengy Vision Building Soze Pications Arabial NJ 97808 USA

De Tokani i Pranisa

interior problem a service.

14

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22nd June 2001

DSMZ4DENTIFICATION SERVICE

Dear Sira.

we have now completed the studion for the Blanch callen of your strains.

1-10 01-405 2-(0.01-406 and 8-10 04-407

Por the results please see the rapors attached

Assembling to the present taxonomy the above mentioned strains can be affiliated to the genus and species interilered in the protocol.

Pathopenity was not tested.

Yours stricerely.

DSN2 Ceutsche Semmiono von Mikroeggenlamen und Zellkulimen Gribt!

Ves Oc. 1 Verber

Brick: Identification reports and involce no 2103007

Marie College College



Identification of strain 1', Dr. S.-Y. Lee, Geo-Centers Inc. (DSM ID 01-405).

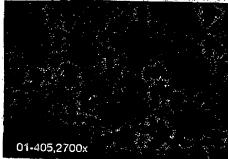
20.06.2001

most probably: Rhizobium rhizogenes (Agrobacterium rhizogenes)

### Properties of the strain

phonylacetate malele

•		
Shape of calls width µm	rods 0.6-0.8	Reaction on litmus milk
length µm	1.5-2.5	Acid from Ethanol
	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	M-Erithritol +
		T T T T T T T T T T T T T T T T T T T
Gram reaction	<u> </u>	Growth with 2% NaCl w+
Lysis by 3% KOH	•	Citrate (Simmons) +
Aminopeptidase (Cerny)	. +	H29 +
Oxidase	•	Result: strain 1
Catalase	•	⇒ most probably; Rhizobium mizogenes
		(Agrobacterium mizogenes)
Flagella	i di sa 🔸 🗀 👉	(Fig. Constituti Finzogenes)
Growth at 35°C		The fatty acid profile of this strain is typical for
41°C	•	the α-proteobacteria. Identification is not
41 C		possible with this analysis.
β-galactosidase	•	The partial sequence of the 16SrDNA shows a
ADH	*	similarity of 99.8% to Rhizobium rhizogenes
Urease (24 h)	•	(Agrobacterium rhizogenes). We also found a
313230 (24 11)	•	100% similarity to a not described strain
Hydrolysis of	• :	called 'R. tropic! 2A'.
gelatine		Physiological tests point to Rhizoblum rhizogenes (Agrobacterium rhizogenes) ( e.g.
esculin	+	no growth at 35 ¢) but cannot identify the
DNA	+	species reliable.
starch	+	Since we are not able to perform
		phytopathogenio tests which differentiate
Reduction of nitrate	•	between highly related species in this area,
		identification is based on physiology and 168
Malonal utilization	*	rDNA sequence only.
Alcaline reaction	•	
é madre		Magnification 2675x
Utilization of		and the first of the second of
glucose.	+	
arabinose	•	
mannose	•	
mannitol		Section 1988
N-acetyl glucosamine	. * . *	
maliose		The state of the same of the
caprate gluconate	- <b>1</b> - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
acipaje Aincousto		
Sulfille.	(書)。	



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16.363	2238	0.031	0.915	19.048	19:6 CYCLO 16 18:1 201		10.69	EL deviate	d -0.603	Reference -0.001
17.159	2623	0.051	0.913	19.544	18:0 30H	• • • •	2.07	BCL deviate	<b>≝</b> -0.001	
17.320	1414	0.096	0.932	19,638	20 d 150		2.40	ECL deviate		
17.806	38¥4	0.107		19.918	2010 120 .		1.49	PCL deviate		Reference 0.004
18.252	1244	0.053		20.174		• • •	• • •	) Max et		
18.581	600	0.049		20.343				) max rt		-
18.830	606	0.050		20.506				BAX PA		
19.132	165	0.027		20.684			• • •	> max 7'5		
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			• • • • • • • • • • • • • • • • • • • •						וכע	

X - profeobacterium

Table 1: Fatty Acid Profile for Strain 1



Identification of strain 2, Dr. S.-Y. Lee, Geo-Centers Inc. (DSM ID 01-406)

Burkholderia sp.

Properties of the strain

•	1	* ;	•
Shape of cells	rods	Utilization of	,
width μm		<del>-</del> <del>-</del>	
	0.7-0.9	butylamin	-
length µm	1.5-3.5	L-arabitol	
	<u>(</u>	rhamnose	. 🔺
Pigments		L-alanin	T At
Flagella			<b>T</b>
. Iodicus	•	melibiose	<b>-</b> · · · ,
Gram reaction	i _		•
Lysis by 3% KOH		Manager at a factor	
	•	Result: strain 2	
Aminopeptidase (Cerny)	+	= Burkholderia sp.	
Catalase activity	f 🛦	The partial appropriate of the d	
Oxidase activity	i .	The partial sequencing of the 1	OSIDINA
Oxidase activity	+	shows a similarity of around 97	% to several
		species of the genus Burkholds	oria .
ADH	-	• -	•
		The profile of the cellular fatty a	icide le tunical
Hydrolysis of gelatin	<u> </u>	for the Burkholderia-group.	ioida ia typical
esculin		ión aro poranorena-Biroch	
casein	•	The results of the physiological	tests do not
starch	+	allow a concrete identificatio	n of this strain.
DNA	+	They point to B. copacia.	
NO <sub>2</sub> from NO <sub>3</sub> (24h)		و ما در در دار در در دار در در دار در	
Control (20)	•	Considering all these results, e	specially the
Denitrification	•	result of the partial sequence	ng, this strain
	1:	may be a member of a new	species within
Utilization of	!	this genus.	- 84
m-hydroxy-benzoat		Beilent	
*			The second second second second

α-amylamin glucose citrat malat arabinose mannose mannit adipat caprat gluconat maliose citraconat itaconat inosito!

butandici tryptamin Magnification ~2700 x:



	Version:	<b>3.10</b>						DAT	A: B015	18321A	18-HAY-01 13:54:17
IV: Bottle:	1430	UN-Y-C Sampli	1-40d-2	ebo cen ebaao)			·	· · · · · ·	Da	te of	run: 18-HAY-01 17:28:12
RE	Area	Ar/He	Respon	ECL.	<b>llane</b> ;		#	Ç.	ment	<b>i</b>	Comment 2
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2.060	755	0.03#									
4.046 6.183	600 1486	0.036		10.925	Sum In Feature	2.,	0.17	ECL dev	Lates	-0.003	unknown 10.928
7.663	13906	0.041		12,937	13,1 AT 12-13	* * *	0.40				
9.015	1607	0.040		14.001	14:0		3.65	EQL dev			Koference -0.004
9.231	1415	0.067		14.861	1511 web			ECL dev			
10.061	18511			14.998	15.0	2	0.37	ECL dev			Reference -0.007
10.620	80640	0.045		15.490	Sum In Feature		4.75	ECL dev			
10,020	27418	0,045	0.960	15.821	Sun In Feature		20.60	ECL dov			16:1 v/c/15 iso 20H
12.479	6477	0.046		16.001	16:0		19.73	ECL dev			
12.672	932	0.051	0.950	16.889	17:0 CYCLO						Reference -0.004
12.762	3488		0.949	17.000	17:0	* * *	0.24	POL dev			Reference -0.006
13.089	3466 4209	0.051	0.949	17.051	16:1 20H		0.88	ECL dev			
13.592	14423	0.030	0.947	17.239	16:0 20H	• • • .		ECL dev			•
14.136	154907	0.049		17.520 17.827	16:0 308		3.62	ECL dev			
14.440	3834	0.047		17.02/	18:1 w/c	• • •	38.84	ECL dev	iates	0.004	4.2.2
14.586	833	0.052	0.941	16.081	18:0	• • •	0.96	EGL dev	iates	-0.002	Reference -0.006
16.033	6740	0.051			11 methyl 18:1 19:0 CYCLO w8c	W/O: 21	0.21	ECL dev	istes	-0.000	
16.362	2275		0.935	10.000	19:0 CICLO WSC	• • •	1.08				Keference -0.003
17,655	948		0.931	19.834				ECL dev			
****	19111				20:1 w/c SUMMED FEATURE		4.92	ECL dev		0.003	
****		• • •	•••					12:0 AL			unknown 10.928
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la l want		•							-		15:0 ISO 20H/16:1w7c
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	TSBA40 {	Rev 4.1	O) Burid	olderia					0.869	(Pseuc	iononas cepecia)
			В.	cenacia					D. 869	(Pages	loronne censole)
			Ų	. d. GE	subgroup B*				0.869	(Paeuc	dogonas cenacia)
			Ŗ	. c, GC	aniberoup A*				0.514	(PRME	Inmones cenerisi
-			В.	pyrrocin	18 <sup>88</sup>	• • •		· · · · ·	0.639	(Pseud	lomonas pyrrocinia)
			p. ;	Erecuet.	*				0.624	(Pseud	loconas elathai)

Table 2: Fatty Acid Profile for Strain 2



### identification of Fungue cultures

Sent by: Geo-Centers, Inc., Dr. 6.-Y. Lee

Strain designation: 3

Substrate; soil

### Colony habit:

Colony on maliastract-agair proving about 1 mm per day at 25°C; mycelium velvaty, ollyapress. Colony reverse greenish-black. No growth at 3°CC.

## Marphology:

Confeliptions warp, promist, with quality branching, easily distributing leaving promisent scars. Terminal contribution by 17 p. 3 pm, apportivated.

identity: Cladosportum cladosportoktes (fres.) de Vries

DSM Deutsche Sammkurg von Maroorganismen und Zeilkulturen Sipple

Ergurischweit, June 19, 2001

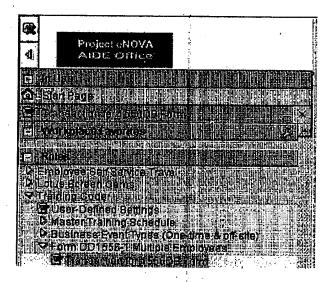
N.B. Universit to DSM2-the and strate was RDS.

# PROJECT e-NOVA

# How Do I Complete Form DD1556-1 (Multiple Trainees/Applicants w/Course Known?

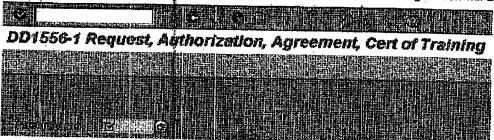
Trigger	Perform this transaction when completing a DD1556-1 Training Form for Multiple individuals
Drill-down Path	Web Portal >SAP Launch-Pad>Role>Form DD1556-1 Multiple Employees>Transaction for 1556DB Form
Tips & Tricks	Menu Path may change per role

 Start the Create Form DD1556-1 Multiple Employees transaction by clicking on the Transaction for DD1556DB hyperlink.



# PROJECT e-NOVA

2. The DD1556-1 Request, Authorization, Agreement, Cert of Training screen will appear.



3. As required, complete the following fields:

Note: If you do not have authorization to enter Training Requests for Multiple Employees you will not get this screen, it will automatically take you straight to the Overview DD1556-1 Training Request Screen,

Field Name	Required/Option	onal Description
Personnel No.	Required	Requestor's employee number
	ji	

If employee number is unknown, [Click] the Search button to the 'right' of Personnel No. to perform a search for correct employee by either Last or First Name. Select the employee from list.

4. [Click] the Enter icon. The Overview DD1556-1 Training Request screen will appear.

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Note that all training records are displayed with current status grouping and processing status of Training Requests.

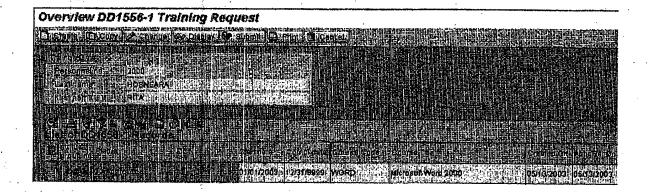
<u>Field Name</u>	Description
Status grouping	10 = In Process
	20 = Released for Approval
	30 = Approved
	40 = Rejected
,	50 = Evaluation Completed
	60 = Evaluation Submitted
	70 = Request Complete
	80 = Cancelled

# PROJECT e-NOVA



Approval Data automatically populates as approvals take place.

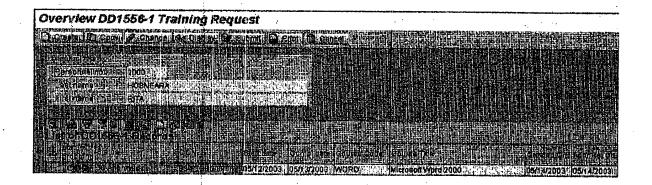
33. [Click] the Back icon. The Overview DD1556-1 Training Request screen will appear.



#### Trainee/ Applicant

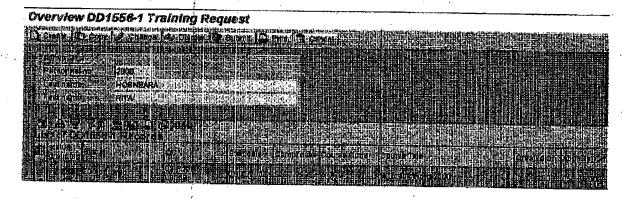
### **Completing the Course Evaluation**

34. Upon return from attending the course, The Trainee/Applicant must evaluate the course. Access the *Overview DD1556-1 Training Request* screen (Steps 1-4).



# PROJECT O-NOVA

35. Select the Request for which you are completing an evaluation by [Clicking] the Record Box to the 'left' of that line. The Training Request line will become activated.



36. [Click] the Change button. The Change DD1556-1 Training Request screen will appear with Course Eval tab automatically displayed.

